

Permit #: 20041
County: BATES
CONFIDENTIAL UNTIL: _____

Date Issued: 05-02-90
Date Cancelled: _____
Date Plugged: 7-29-95

COMMENTS:

OGC FORMS	Date Received
1	
2	
3	07-24-90
3i	
4	07-24-90
4i	
5	7-18-95
6	4-25-94
7	8-3-95
8	
11	
12	
Misc. Form 2	

	TYPE	ID #	Date Received
Logs			
Samples	chip		
	core		
Analyses	water		
	core		
Additional Submitted Data:			



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL

FORM OGC-3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

☒ APPLICATION TO DRILL ☐ DEEPEN ☐ PLUG BACK ☒ FOR AN OIL WELL ☒ OR GAS WELL

NAME OF COMPANY OR OPERATOR Pense Brothers Drilling Co., Inc., a Missouri corporation		DATE 7/20/90	
ADDRESS 800 Newberry Street P. O. Box 551	CITY Fredericktown	STATE MO	ZIP CODE 63645

DESCRIPTION OF WELL AND LEASE	
NAME OF LEASE Harmon & Sons	WELL NUMBER 1
ELEVATION (GROUND) 998'	

WELL LOCATION 2450 FT. FROM (N) SECTION LINE 2000 FEET FROM (W) SECTION LINE

WELL LOCATION S/2 SE/4 NW/4	SECTION 12	TOWNSHIP 41 N	RANGE 32 W	COUNTY Bates
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NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE 654.7 FEET
DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED - FOR WELL ON THE SAME LEASE N/A FEET

PROPOSED DEPTH 450'	DRILLING CONTRACTOR, NAME AND ADDRESS Pense Brothers Drilling Co., Inc.	ROTARY OR CABLE TOOLS Rotary (Air)	APPROX. DATE WORK WILL START 8/01/90 or on permit
NUMBER OF ACRES IN LEASE 394.14	NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR 1		
NUMBER OF ABANDONED WELLS ON LEASE 1			

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?	NO. OF WELLS: PRODUCING 0
NAME N/A	INJECTION 0
ADDRESS N/A	INACTIVE 0
	ABANDONED 1

STATUS OF BOND	<input type="checkbox"/> SINGLE WELL AMOUNT \$	<input checked="" type="checkbox"/> BLANKET BOND AMOUNT \$ 20,000.00	<input checked="" type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED
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REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING ZONE AND EXPECTED NEW PRODUCING ZONE; USE BACK OF FORM IF NEEDED.)

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JUL 24 1990
MO Oil & Gas Council
Economic Geology

PROPOSED CASING PROGRAM				APPROVED CASING - TO BE FILLED IN BY STATE GEOLOGIST			
AMOUNT 50'	SIZE 7"	WT/FT 17 lbs	CEM. to surf.	AMOUNT 50'	SIZE 7"	WT/FT 17 lbs	CEM. to surface
TD to Surf.	4 1/2"	9 lbs	to surf.	TD to Surf	4 1/2"	9 lbs	to surface

I, the undersigned, state that I am the Assistant Vice President of the Pense Bros. Drg. Co., Inc., (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.

SIGNATURE *B. E. Blancett* DATE 7/20/90
B. E. Blancett

PERMIT NUMBER #20041	<input checked="" type="checkbox"/> DRILLER'S LOG REQUIRED	<input checked="" type="checkbox"/> E-LOGS REQUIRED IF RUN
APPROVAL DATE 8/2/90	<input checked="" type="checkbox"/> CORE ANALYSIS REQUIRED IF RUN	<input checked="" type="checkbox"/> DRILL STEM TEST INFO. REQUIRED IF RUN
APPROVED BY <i>Jane Hall</i>	<input checked="" type="checkbox"/> SAMPLES REQUIRED	
	<input type="checkbox"/> SAMPLES NOT REQUIRED	
	<input type="checkbox"/> WATER SAMPLES REQUIRED AT	

NOTE: THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION

APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE.

I, _____ of the _____ Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.

DRILLER'S SIGNATURE	DATE
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MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

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☐ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☐ OIL ☐ GAS ☒ DRY

OWNER PENSE BROTHERS DRILLING CO., INC.		ADDRESS Box 551, FREDERICKTOWN, MD 23645	
LEASE NAME HARMON & SONS		WELL NUMBER #1	
LOCATION 5/2 SE 1/4 NW 1/4		SEC. TWP. AND RANGE OR BLOCK AND SURVEY SEC. 12, T 4N, R 32W	
COUNTY BATES	PERMIT NUMBER (OGC-3 OR OGC-31) 20041		
DATE SPUNDED 8/27/90	DATE TOTAL DEPTH REACHED 8/29/90	DATE COMPLETED READY TO PRODUCE OR INJECT 10/20/90	ELEVATION (DF, RKR, RT, OR Gr.) FEET GR 998' (TOP)
TOTAL DEPTH 450'	PLUG BACK TOTAL DEPTH 360'	ELEVATION OF CASING HD. FLANGE 990'	
PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION 225' thru 235'		ROTARY TOOLS USED (INTERVAL) 0' TO 450'	CABLE TOOLS USED (INTERVAL) NIL
DRILLING FLUID USED NIL (AIR)	WAS THIS WELL DIRECTIONALLY DRILLED? NO		WAS COPY OF DIRECTIONAL SURVEY FILED? N/A
TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST) GAMMA RAY - NEUTRON			DATE FILED 4/20/94

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
SURFACE	8 5/8"	7"	17 LB.	51' 07"	8	NIL
PROD. CSG.	6 1/4"	4 1/2"	9.5 LB	445'	59	NIL

TUBING RECORD

LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
N/A IN.	N/A FEET	N/A FEET	N/A INCH	N/A FEET	N/A FEET	N/A	N/A FEET

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FEET	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
2	3 1/8" DENS JETS H.S.C.	399.5' to 403.5' & 417' to 424'	250 GAL 15% HCL 3000 LBS SAND	399.5' to 403.5' & 417' to 424'
2	3 1/8" DENS JETS H.S.C.	225' to 235'	100 GAL 15% HCL 2000 LBS SAND	225' to 235'

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION NIL		PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING - IF PUMPING, SHOW SIZE AND TYPE OF PUMP) SWABBED - WATER ONLY BOTH ZONES.				
DATE OF TEST	HOURS TESTED	CHOKE SIZE	OIL PRODUCED DURING TEST bbls.	GAS PRODUCED DURING TEST MCF	WATER PRODUCED DURING TEST bbls.	OIL GRAVITY API (CORR.)
TUBING PRESSURE	CASING PRESSURE	CALC'D RATE OF PRODUCTION PER 24 HOURS		OIL bbls.	GAS MCF	WATER EST. RATE 20 BBL DAY

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

METHOD OF DISPOSAL OF MUD PIT CONTENTS

DRILLED WITH AIR ROTARY - CUTTINGS ONLY OVERFILLED WITH TOPSOIL TO SURF. LEVEL

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE **ASST. V.P.** OF THE **PENSE BROS. DRLLG. CO., INC.** COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE

DATE 7/14/95	SIGNATURE PENSE BROS. DRLLG. CO., INC. BY: B. E. BLANCETT
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1 OF 1
HARMON & SONS NO. 1 WELL - PERMIT NO. 20041

S/2 SE/4 NW/4 SECTION 12-41N, 32W, BATES CO, MO

ELEVATION: 998' (TODD) PENSE BROS. DRG. CO., INC.

PREPARED BY	BEB
DATE	8/29/90

0-4 TOPSOIL, CLAY-BROWN, SLIGHTLY SANDY

4-6 SHALE, DARK GREY TO SLIGHT COAL SEAM & SANDSTONE AT BASE.

6-10 CLAY, TAN TO LIGHT BROWN, SLIGHTLY CALCAREOUS

10-25 SHALE, LIGHT GREY, SILTY

25-35 LIMESTONE, SANDSTONE STRIATIONS, TAN TO BUFF, SLIGHT WATER SHOW

35-200 SHALE, GREY TO BLuish GREY, DENSE TO OCCASIONAL FRIABLE,

200-225 SHALE, LIGHT GREY, WITH SHALY SILTSTONE STRIATIONS

225-242 SANDSTONE, MEDIUM GRAIN, TAN TO LIGHT BROWN,
STAIN, SLIGHT COAL SEAM, SLIGHTLY CALCITIC, SOME
OIL IN PIT WHILE DRILLING, FAIR FLUORESCENCE & OIL CUT.

242-252 LIMESTONE, SLIGHT POROSITY, SLIGHT GREENISH SHALE
STRIATION AT TOP, 80% DULL TO BRIGHT FLUORESCENCE,
SLIGHTLY DOLITIC IN SOME ZONES, COAL PARTICLES AT BASE.

252-268 SHALE, LIGHT GREY, FEW COAL PARTICLES & QUARTZ CRYSTALS

268-282 LIMESTONE, WHITE TO CREAM, SLIGHTLY DOLITIC AT TOP
PORTION.

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282-295 SHALE, GREY TO DARK GREY

295-300 LIMESTONE, GREY TO LIGHT BROWN, OIL & Gas Count:

300-315 SHALE, DENSE, GREY TO DARK GREY, SLIGHTLY CALCAREOUS

315-320 LIMESTONE, DENSE, SHALY, GREY TO DARK GREY

320-325 SHALE, GREY TO DARK GREY

325-346 LIMESTONE, DENSE, SHALY, GREY TO DARK GREY

346-375 SHALE, GREY TO LIGHT GREY, SILTY WITH SILTSTONE STRINGERS

375-400 SILTSTONE WITH SANDSTONE & SHALE STRIATIONS CALCITIC.

400-435 SANDSTONE WITH SILTSTONE AND SHALE STRIATIONS, COAL PARTICLES & STAINING COIL

435-450 LIMESTONE, TAN TO LIGHT BROWN, FEW SHALE & COAL PARTICLES AT BASE

T.D. - 450



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
NOTICE OF INTENTION TO ABANDON WELL

FORM OGC-6

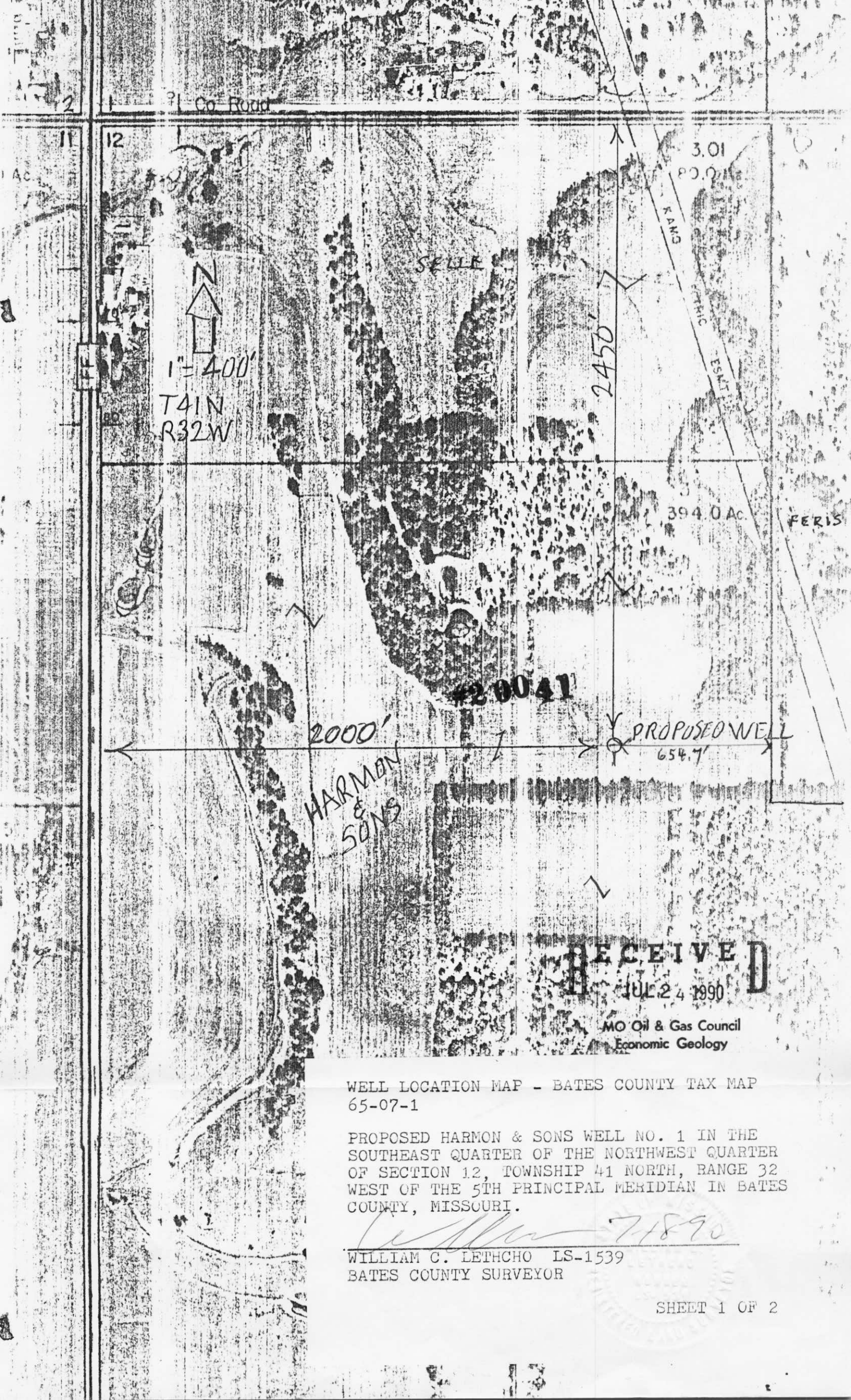
NAME OF LEASE <i>HARMON & SONS</i>		DATE <i>4/15/94</i>	
WELL NUMBER <i>1</i>	LOCATION <i>2450</i> FEET FROM (N) SECTION LINE AND <i>2000</i> FEET FROM (W) SECTION LINE OF		
SECTION <i>12</i>	TOWNSHIP <i>41N</i>	RANGE <i>32W</i>	COUNTY <i>BATES</i>
THE ELEVATION OF THE GROUND AT WELL SITE IS <i>998</i> FEET ABOVE SEA LEVEL.		PERMIT NUMBER (OGC-3 OR OGC-51 NUMBER) <i>20041</i>	
NAME OF CONTRACTOR OR COMPANY THAT WILL DO WORK IS: <i>PENSE BROTHERS DRILLING CO., INC.</i>			
ADDRESS <i>800 NEWBERRY ST. P.O. BOX 551</i>		CITY <i>FREDERICKTOWN,</i>	STATE <i>MO</i>
ZIP CODE <i>63645</i>			
DETAILS OF WORK (INDICATE SIZE, KIND, AND DEPTH OF PLUGS, WHERE CASING WILL BE PULLED, OTHER PERTINENT DETAILS) <i>THIS WELL REACHED TOTAL DEPTH OF 450' 8/29/90. SURFACE HOLE OF 9 3/4" DRILLED TO 53'; 51'07" OF 7" (17LB.) SURFACE CASING SET & CEMENTED TO SURFACE WITH 8 SACKS CEMENT. 6 1/4" HOLE DRILLED FROM 53' TO T.D. OF 450' WITH 445' 4 1/2" (9.5LB.) CASING RAN IN HOLE & CEMENTED TO SURFACE WITH 59 SACKS CEMENT. PERFORATED 399.5' TO 403.5' AND 417' TO 424' - TREATED WITH 250 GAL. 15% HCL AND 3000 LBS. SAND. NO MEASURABLE OIL OR GAS SO HOLE FILLED (W) HEAVY MUD TO 380' & CEMENT PLUG FROM 360 TO 380. PERFORATED 10/18/90 FROM 225' TO 235 FEET, TREATED 100 GAL. 15% HCL 2000 LB SAND - Recovery mostly water - slight show oil -</i> <i>NO SURF OR OTHER CASING TO BE PULLED (ALL CEMENTED TO SURF.) HEAVY MUD TO 220', CEMENT PLUG 200' TO 220', HEAVY MUD TO 30', CEMENT PLUG TO 5' FROM 30' CASING TO BE CUT OFF 4' FROM SURFACE & CAPPED.</i> <i>LITHOLOGY LOG ATTACHED</i> <i>GAMMA RAY - NEUTRON LOG ATTACHED.</i>			
RECEIVED JUL 18 1995 O Oil & Gas Council			
CERTIFICATE: I, the undersigned, state that I am the <i>ASST. V. P.</i> of the <i>Pense Bros. Drg. Co., Inc.</i> (company), and that I am authorized to make this report; and that this report was prepared under my supervision and direction and that the facts stated herein are true, correct, and complete to the best of my knowledge.			
SIGNATURE <i>B. E. Blauvelt</i> B. E. BLAUVELT		DATE <i>4/20/94</i>	



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
PLUGGING RECORD

FORM OGC 7

OWNER PENSE BROTHERS DRILLING CO., INC.		ADDRESS Box 551, FREDERICKTOWN, MD 63645	
NAME OF LEASE HARMON & SONS		WELL NUMBER #1	PERMIT NUMBER (OGC-3 OR OGC-31 NUMBER) 20041
LOCATION OF WELL 5/2 SE/4 NW/4		SEC. TWP. RING OR BLOCK & SURVEY SEC. 12, T 41N, R 32W	
COUNTY BATES		CHARACTER OF WELL AT COMPLETION (INITIAL PRODUCTION) DRY	
APPLICATION TO DRILL THIS WELL WAS FILED IN NAME OF: PENSE BROS. DRILG. CO., INC.		HAS THIS WELL EVER PRODUCED OIL OR GAS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
DATE ABANDONED 7/29/95		TOTAL DEPTH 450' + PLUG, BACK TO 360'	
AMOUNT WELL PRODUCING PRIOR TO ABANDONMENT OIL (BBLS/DAY) NIL		GAS (MCF/DAY) NIL	
WATER (BBLS/DAY) Est. 20 BBLS. Daily			
Name of each formation containing oil or gas. Indicate which formation open to well bore at time of abandonment		Fluid content of each formation	
SQUIRREL SANDSTONE HEPLER		Slight Show oil & GAS WITH WATER AS ABOVE PLUGGING EFFECTED 7/29/95	
Depth interval of each formation		Size, kind, & depth of plugs used, giving amount cement	
PERFORATED 399' TO 424'		Plug Cement TO 360'	
PERFORATED 225' TO 235'		HEAVY MUD 360' TO 240', CEMENT PLUG TO 190', HEAVY GEL MUD 15', Cement Plug TO 3'	
SIZE PIPE	PUT IN WELL (FT)	PULLED OUT (FT)	LEFT IN WELL (FT)
7"	51' 07"	NIL	48'
4 1/2"	445'	NIL	442'
GIVE DEPTH AND METHOD OF PARTING CASING (SHOT, RIPPED, ETC.)		PACKERS AND SHOES	
2' 7" CUT OFF FROM SURF		FLOAT SHOE	
3' CUT OFF FROM SURF		RECEIVED	
		AUG 03 1995	
WAS WELL FILLED WITH MUD, LADEN FLUID? CASING CEMENT TO SURF - PLUGGED AS SHOWN ABOVE.		INDICATE DEEPEST FORMATION CONTAINING FRESH WATER SQUIRREL - 399' - 424' HEPLER - 225' - 235'	
NAME AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE			
NAME ONLY LEAS OPERATOR (ARBA) PENSE BROS. DRILG. CO., INC. LANDOWNER: DANAY HAHN		ADDRESS 63645 Box 551, FREDERICKTOWN, MD RT. 2, Box 243, ADRIAN, MD 64720	
DIRECTION FROM THIS WELL N/A NW APPROX 1/2 MILE.			
METHOD OF DISPOSAL OF MUD PIT CONTENTS OVERFILLED WITH TOPSOIL TO SURFACE LEVEL, NOW GRASSED OVER.			
NOTE FILE THIS FORM IN DUPLICATE WITH (USE REVERSE SIDE FOR ADDITIONAL DETAIL)			
CERTIFICATE I, the undersigned, state that I am the ASST. V. P. of the Pense Bros Drilg Co, Inc. (Company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.			
SIGNATURE B. E. BLANCETT By: B. E. BLANCETT		DATE 7/29/95	



1" = 400'

T41N
R32W

3.01
80.0

KANG

ESALT

394.0 Ac.

FERIS

20041

2000'

HARMON
&
SONS

PROPOSED WELL
654.7'

RECEIVED
JUL 24 1990

MO Oil & Gas Council
Economic Geology

WELL LOCATION MAP - BATES COUNTY TAX MAP
65-07-1

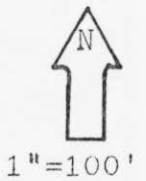
PROPOSED HARMON & SONS WELL NO. 1 IN THE
SOUTHEAST QUARTER OF THE NORTHWEST QUARTER
OF SECTION 12, TOWNSHIP 41 NORTH, RANGE 32
WEST OF THE 5TH PRINCIPAL MERIDIAN IN BATES
COUNTY, MISSOURI.

WILLIAM C. LETHCHO LS-1539
BATES COUNTY SURVEYOR

SHEET 1 OF 2

W. C. LETHCHO
COUNTY ENGINEER & SURVEYOR
Bates County Court House
BUTLER, MO. 64730
Phone 679-4031

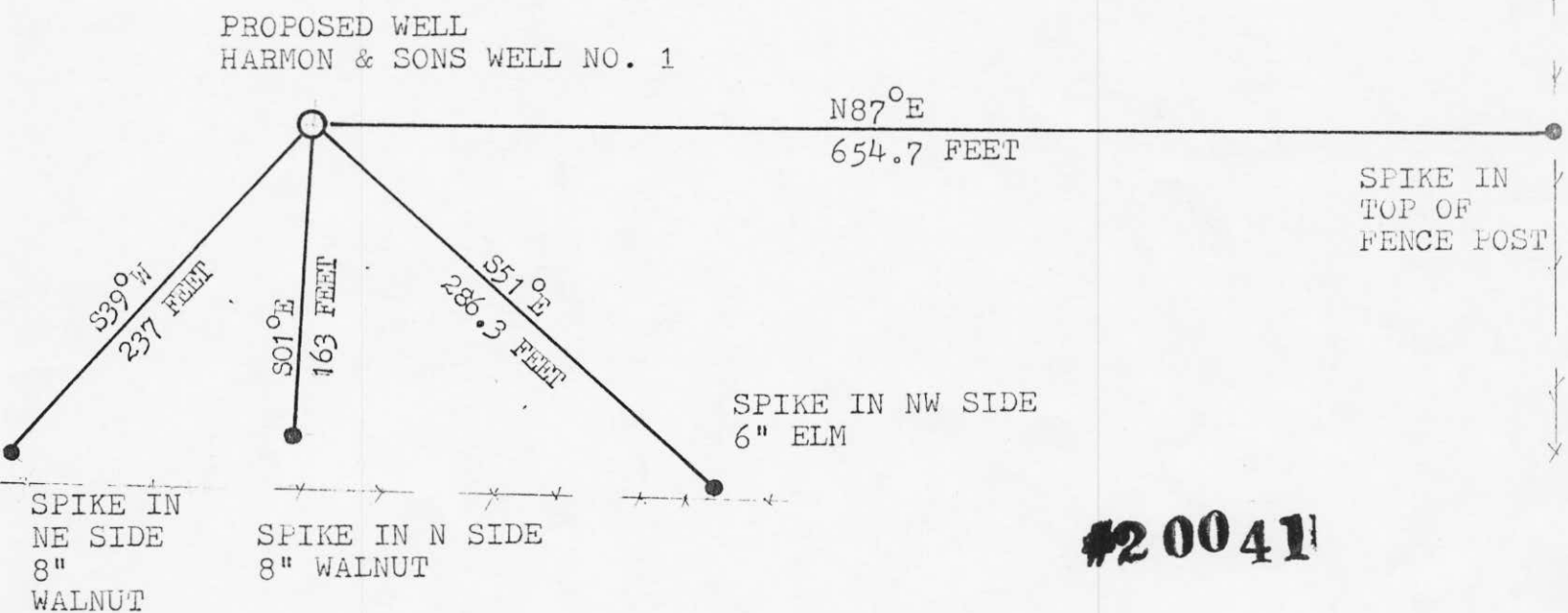
WELL REFERENCE TIES IN THE SOUTHEAST
QUARTER OF THE NORTHWEST QUARTER OF
SECTION 12, TOWNSHIP 41 NORTH, RANGE
32 WEST OF THE 5TH PRINCIPAL MERIDIAN
IN BATES COUNTY, MISSOURI



HARMON & SONS WELL NO. 1

MAGNETIC BEARINGS
8° EAST DECL.

FOR: PENSE BROTHERS DRILLING CO. INC.



SHEET 2 OF 2

THIS IS TO CERTIFY THE REFERENCE TIES
SHOWN ON THIS SKETCH ARE IN ACCORDANCE
WITH THE DNR CURRENT MINIMUM STANDARDS
FOR PROPERTY BOUNDARY SURVEYS 10 CSR
30-2.010

WILLIAM C. LETHCHO LS-1539
JULY 18, 1990

RECEIVED
JUL 24 1990

MO Oil & Gas Council
Economic Geology